

Remarks:

This amendment is submitted in an earnest effort to advance this case to issue without delay.

The method claims have been dropped. The dependency of apparatus claim 20 has been corrected as suggested. The objection to claims 15 and 16 does not take into account the last line of each of these claims that states that the factors identified are whole positive numbers, which is a clear definition or limitation of these terms so there is no lack of clarity.

In claim 12 two dictation or transcription errors, namely "power" for "para" ("superparamagnetisch" in original German claim 12) and "thermal" for "ferro" ("ferromagnetisch" in original German claim 12), have been corrected.

Main apparatus claim 12 has been amended by recitation of the various functions from some of the method claims to better define the invention and to state that both magnetic fields are applied to the analyte at the same time. The dependent apparatus claims have been amended to better conform to amended claim 12.

No new matter whatsoever has been added.

US 6,597,176 of Simmonds the probe uses a homogenous alternating magnetic field of a fixed frequency is used to excite the analyte. The detector is a gradiometer that does not respond to the homogenous magnetic field. The particles are detected in that their radiations characteristics as localized dipoles are used. This nonhomogeneous radiation is registered by the detector.

US 2003/0210040 of Kang does something completely different, namely the serial analysis of macroscopic ferrite cores for quality control. Thus it is dubious whether the person skilled in the art would have recourse to this art in combination with Simmonds that does something completely different, namely work with microscopic particles. The ferrite cores tested by the dispersion, that is the frequency dependency, of the magnetic susceptibility in a particular frequency range. To this end the ferrite cores are excited with magnetic fields of different frequency, but always one field at a time, that is never with both fields at the same time.

US 6,005,443 of Damgaard is not related to multiple frequencies as in the instant invention. A "fractional n divider" is disclosed as is standard in frequency synthesizers used for mobile radio systems to obtain a phase manipulation of division followed by various steps as shown in FIGS. 4-7.

Nonlinear effects derived from two magnetic fields of two different frequency are not seen in the art. The result, it has been discovered, is a very sensitive system for detecting or

quantifying superparamagnetic or ferromagnetic particles. The §103 rejections are clearly overcome by the amended claims.

Once a claim is allowed, the translation serving as specification will be amended to insert US-style headings, a PCT cross-reference paragraph, and to clear up some obvious typographical errors.

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Enclosure:

None.